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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,391	02/23/2004	Masahiko Tsukuda	AOY-3972US	8430
23122 7590 03/14/2007 RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			EXAMINER PSITOS, ARISTOTELIS M	
			ART UNIT	PAPER NUMBER
			2627	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/784,391

Applicant(s)

TSUKUDA ET AL.

Examiner

Aristotelis M. Psitos

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 4-7 and 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 8-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

Applicants' response of 12/13/06 has been considered with the following results.

Claims 4-7, 11-13 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species there being no allowable generic or linking claim.

As argued by applicants, there is no restriction due to the presence of generic claims 1 and 9.

This is not an argument against/demonstrating any error, but rather confirms the position taken by the examiner in the original restriction/election requirement.

**Hence applicant's election of species as identified in the OA election of 11/13/06 in the reply filed on 12/13/06 has been treated as an election without traverse (MPEP § 818.03(a)).**

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 03/014660.

**Applicants' attention is drawn to US Patent 7053394 that is the English (US) equivalent of the WO document. No copy of the WO document is provided herewith.**

As noted in the description of figure 5 & 6, both an electron beam optical system, elements 301, 202, and an appropriate position detection unit/elements 305 and or the focus grid 307 -see the associated description thereof, for instance starting at col. 8 line 20, are so found. Element 307 are indeed closest to the master unit (element 303).

2. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizasawa et al.

Mizasawa et al discloses an electron beam recording system having appropriate elements for the generation of the electron beam as well as position detection capabilities – see the description of figures

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7 starting at col. 12 line 4 as well as figure 10, element SNS starting at col. 15 line 42. Claim 2 is met.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsuda et al.

The document describes with respect to figure 1 an electron beam-recording device having the appropriate optical (element 31) and position detection element – see for instance the secondary electron detector (element 36).

The limitations of claim 2 are self evident and met.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

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examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 3,8, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1 and 2 above as stated in paragraphs 1,2 or 3 and further in view of the acknowledged prior art and JP 2003-077189

Applicants' attention is drawn to PGPUB 2003/0007444A1, which is relied upon as the English equivalent of the Japanese document.

Claim 3 requires not only a shielding element – which is acknowledged as being part of the acknowledged prior art of submitted figure 15, but also an appropriate detecting capability with respect to the shielded beam and the appropriate beam deflection capability.

Applicants' attention is drawn to the above noted JP document, and the PUPUG English equivalent, wherein the shielding element(s) are further depicted with respect to figures 1,3 and their associated description.

As noted therein, the appropriate control of the beam is provided for as required by claim 8. The examiner interprets the operation of the shielding element and the appropriate feedback signals as meeting the claimed limitations. (claims 3,8 – as well as claims 9 & 10 –see below).

Claim 9 is interpreted as the analogous method presentation of claims 1 and 3, while claim 10 introduces the feedback control capability. Such is present when the above combined system operates.

Hence, It would have been obvious to modify the base system of any of the documents relied upon above in paragraphs 1,2, or 3 and use the additional well known shielding capability – either the acknowledged prior art of fig. 15 or the JP document (relying upon the PGPUB equivalent) and appropriate feedback deflection control for the reasons stated in the secondary documents.

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**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Katsumura et al and Kamimura et al are also cited as illustrative of prior art electron beam recorders having the optical and positioning capabilities and can be relied upon as meeting those claimed elements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-F: 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Aristotelis M Psitos  
Primary Examiner  
Art Unit 2627



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